

Abstract

*Application
Program*

A data model whereby individual processes are defined as activities, each of which is allocated to no more than one activity, any concerning the state of the resource, any scheduled, and a list of alternative resources, if any. Activities are linked to each other via auxiliary objects, which contain information concerning the minimum and maximum time between activities. Orders may contain input and/or output interface nodes, representing the materials consumed and produced by the order. Each output interface node representing a quantity of material created from one order is linked via an auxiliary object to respective input interface node or nodes from other orders that are scheduled to receive that material. Order anchors are defined whereby a planning algorithm can easily reference an order by its order number in a database table. Planning object anchors allow the planning algorithm to access all the orders for a given material, and resource anchors permit access to all activities scheduled for that resource.